

5                   **SYSTEM, METHOD, AND PROGRAM PRODUCT FOR RE-**  
**PARAMETERIZING THREE DIMENSIONAL MODELS REPRESENTED AS**  
**CATMULL-CLARK SUBDIVISION SURFACES**

10    **ABSTRACT**

A system, method, and program product for re-parameterizing one or more three-dimensional Catmull-Clark models is disclosed. Each of the models has one or more surfaces and one or more extraordinary vertices. One or more adjacent iso-parameter  
15    lines of the model have a spacing between them that increases as the iso-parameter lines approach the extraordinary vertex. A re-parameterization process that re-parameterizes the model so that one or more of the extraordinary vertices have adjacent iso-parameter lines with spacing that does not increase as the lines approach the extraordinary vertex.